

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018108**Date Inspected:** 12-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

TOWER JETTY

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of weld joint # 06 located on East tower Lift-4 Skin 'A', 119 M Backfill plate ESD1 – FASA4 – 2B/E as per the critical weld repair report # T-CWR703. Welder is identified as 040690. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS – 345+485 – SMAW – 4G (4F) – Repair – 2.

Repair welding of weld joint # 05 located on West tower Lift-4 Skin 'A', 119 M Backfill plate WSD1 – FASA4 – 2B/E as per the critical weld repair report # T-CWR704. Welder is identified as 040690. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS – 345+485 – SMAW – 2G (2F) – Repair – 2.

Repair welding of weld joint # 15 located on South tower Lift-4 Skin 'A', 119 M Backfill plate SSD1 – FASA4 – 1B/E as per the critical weld repair report # T-CWR707. Welder is identified as 057220. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply with the

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WPS – 345+485 – SMAW – 4G (4F) – Repair – 2.

Visual Inspection Testing (VT) for Interference between Railing Bolts and Diaphragm web welds of Lift-3 Tower Shafts at 99 M Elevation

This QA inspector performed VT for tapped holes of railing at 99 M elevation diaphragm on North, East, West and South shafts of lift-3 after ZPMC personnel completed the repair work as per the Changxing Daily dated 11-10-10 issue # 1357R0. This area was previously tested and accepted by ZPMC/ABF Quality Control personnel. The members are identified as TOWER Components. The locations details are as follows:-

1. NORTH shaft – 2 locations
2. WEST shaft – 1 location
3. SOUTH shaft – 3 locations
4. EAST shaft – 2 locations

Note: - The drilled tap holes which were through the thickness of the diaphragm web plate has been caulked from bottom and M 20x50 size bolts used to fill in the tap holes.

For further information see the attached pictures.

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 6B located on Lift-5 bracket SD1 – BRSA5 – 1. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – TC – U5b.

Weld joint # 2B located on Lift-5 bracket ND1 – BRSA5 – 2. Welder is identified as 040724. ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC – U4b.

Weld joint # 6B located on Lift-5 bracket SD1 – BRSA5 – 1. Welder is identified as 045560. ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – TC – U5b.

Fluxcored Arc Welding (FCAW):

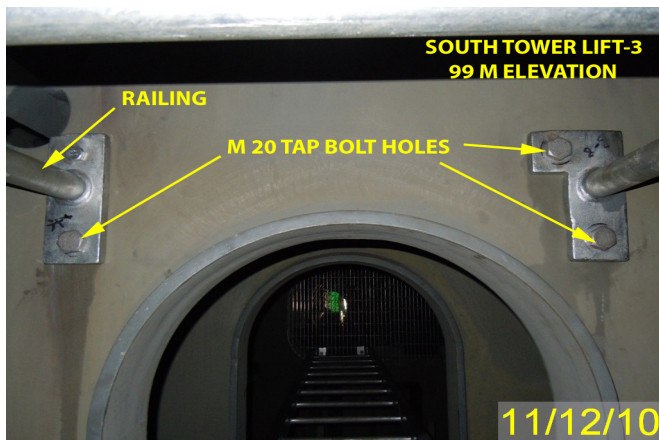
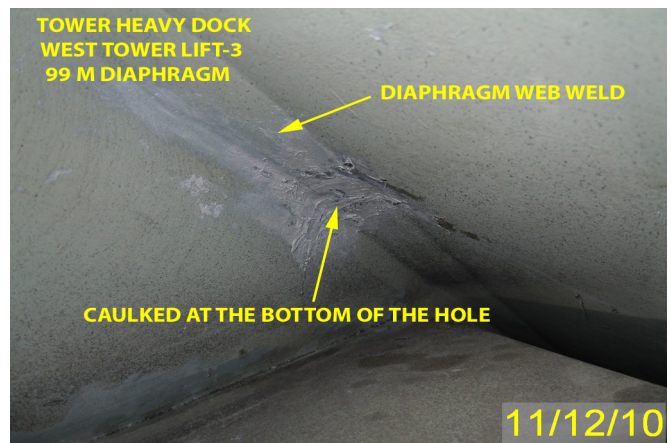
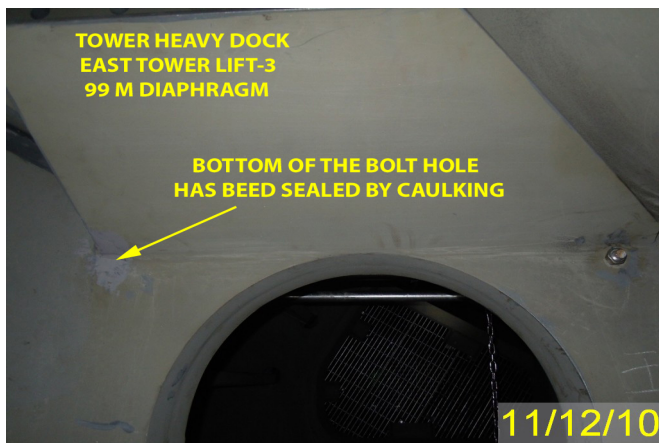
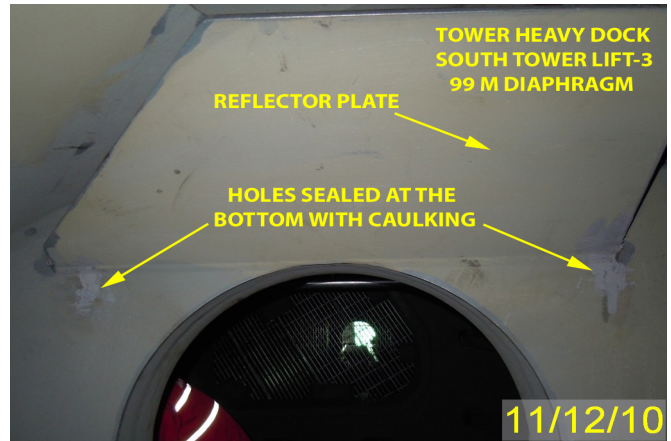
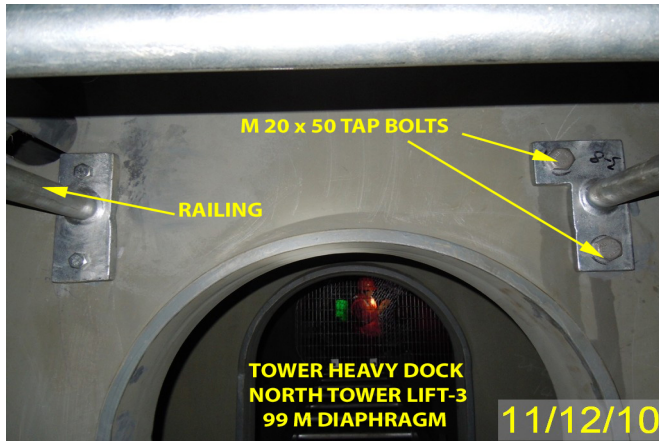
Weld joint # 02 located on Lift-6 Tower Head of skin 'A' WSD1 – FESA6 – 4. Welder is identified as 042218. ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 17 located on Lift-6 Tower Head of skin 'A' WSD1 – FESA6 – 4. Welder is identified as 042218. ZPMC Quality Control (QC) Inspector is identified as Xu Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

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Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
